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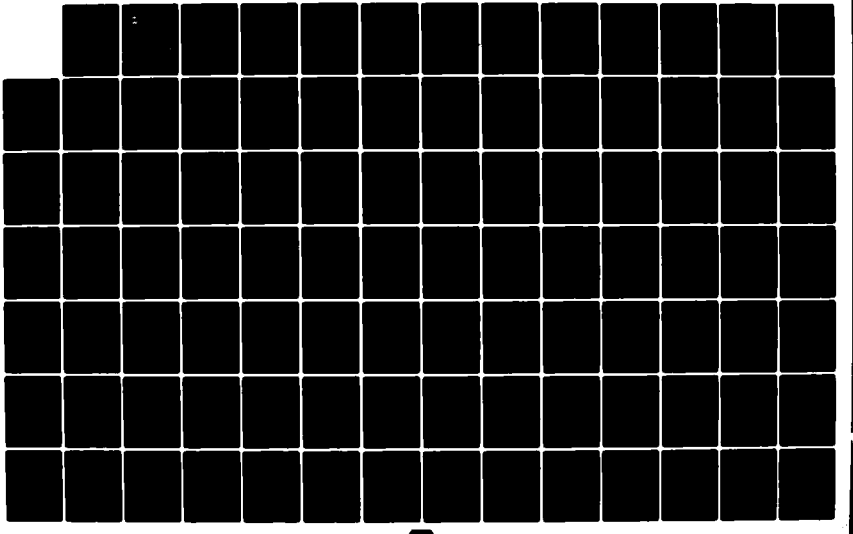

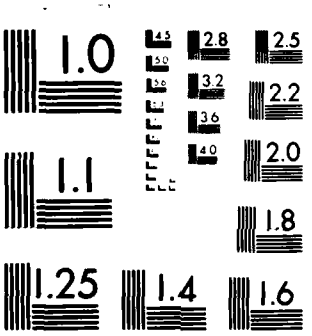

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No. 58

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Date of Report

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20. ABSTRACT

This is the Soviet Laser Bibliography for March-April 1982, and is No. 58 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; crystal growing; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications; beam propagation; computer technology; holography; laser-induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.

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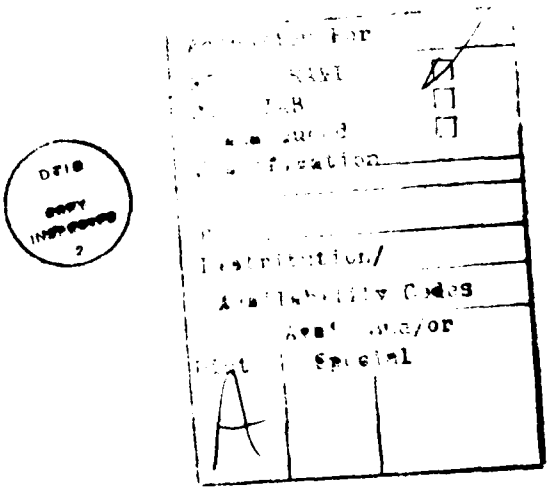
Introduction

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is March-April 1982, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Russian Reference Journals are also included. Laser items from the popular or semipopular press are generally omitted.

For convenience we have abbreviated frequently cited source names; a source abbreviations list and an author index are included. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry (RZh, KL) indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library. The authors' affiliations are indicated by the numbers in parentheses following the authors' names in the text and are listed in the Author Affiliations List. New affiliations are assigned a new number and are added to a cumulative list which includes all affiliations from 1969 to the present. Only those affiliations which appear in this issue are listed in this issue's Author Affiliations List.



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H. LASER MEASUREMENT APPLICATIONS

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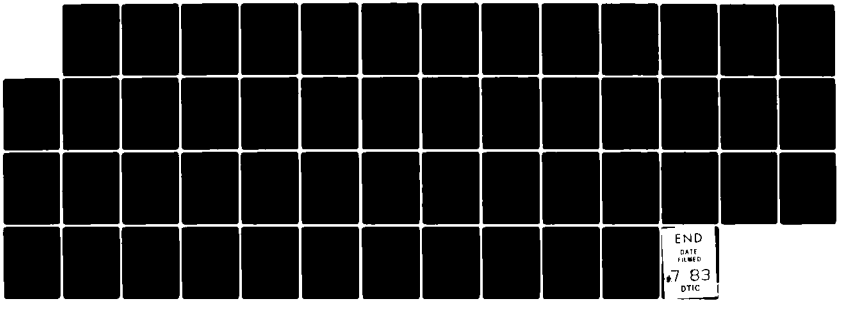

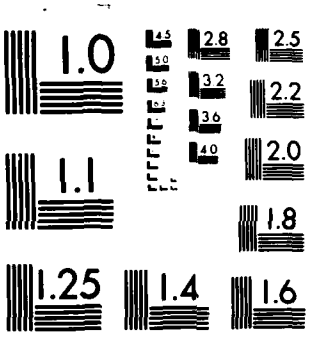

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794. Demchuk, M.I., and M.A. Ivanov (87). Statisticheskiy odnokvantovyy metod v optiko-fizicheskom eksperimente (Statistical single-quantum method in optophysical experiments). Belorusskiy GU. Minsk, 1981, 176 p. (TVKE, 30/82, 362)

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798. Gologaficheskiye metody khraneniya i obrabotki informatsii (holographic methods for information storage and processing). Frunzinskiy politekhnicheskiy institut. Sbornik nauchnykh trudov. Edited by A. Akayev (332). Frunze, 1981, 110 p. (RZhRadiot, 4/82, 4Ye642)

799. Karpman, I.M., M.N. Libenson, and Ye.B. Yakovlev (0). Lazernaya termolitografiya v proizvodstve integral'nykh skhem (Laser thermolithography in the production of integrated circuits). Leningrad, LDNTP, 1981, 26 p. (KL, 11/82, 9392)

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811. Vagner, Ye.T. (0). Lazery v samoletostroyenii (Lasers in aircraft manufacture). Moskva, Mashinostroyeniye, 1982, 184 p.

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813. I Vsesoyuznaya mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya "Opticheskiye i radiovolnovyye metody i sredstva nerazrushayushchego kontrolya kachestva materialov i izdeliy", Fergana, 26-30 oktyabrya 1981. Tezisy dokladov (First All-Union Interscholastic Scientific and Technical Conference on Optical and Radiowave Methods and Means for Nondestructive Quality Control of Materials and Products, Fergana, 26-30 Oct 1981. Summaries of the reports). Ferganskiy politekhnicheskiy institut (674). Fergana, 1981. Part 1, 313 p. (RZhF, 3/82, 3D1031). Part 2, 325 p. (RZhF, 4/82, 4D1076)

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817. V Vsesoyuznoye soveshchaniye po radiometeorologii, Kishinev, 15-19 maya 1978. Trudy (Fifth All Union Conference on Radiometeorology, Kishinev, 15-19 May 1978. Proceedings). Edited by A.A. Chernikov, and V.Yu. Mel'nichuk (0). Moskva, Gidrometeoizdat, 1981, 332 p. (RZhF, 3/82, 3Zh152)

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820. Zuyev, V.Ye., and I.E. Naats (78). Obratnyye zadachi lazernogo zondirovaniya atmosfery (Inverse problems in laser probing of the atmosphere). Edited by M.V. Kabanov (78). Novosibirsk, Nauka, 1982, 242 p.

IV. SOURCE ABBREVIATIONS

	(CIRC Codens)	
APP	(APTLB)	Acta physica polonica
BWAT	(BWATA)	Biuletyn Wojskowej akademii technicznej J. Dabrowskiego
CCF	(CKCFA)	Ceskoslovensky casopis pro fyziku
CJP	(CZYPA)	Czechoslovak Journal of Physics
DAN B	(DBLRA)	Akademiya nauk Belorusskoy SSR. Doklady
DAN SSSR	(DANKA)	Akademiya nauk SSSR. Doklady
DAN Ukr	(DUKAB)	Akademiya nauk Ukrayins'koyi RSR. Dopovidi. Seriya A. Fizyko-matematychni ta tekhnichni nauky
DR	(DERUB)	Deponirovannyye rukopisi
FAiO	(IFAOA)	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana
FGiV	(FGVZA)	Fizika goreniya i vzryva
FiKhOM	(FKOMA)	Fizika i khimiya obrabotki materialov
FiKhS	(FKSTD)	Fizika i khimiya stekla
FM	(FNMKA)	Finommechanika, mikrotechnika [Hungary]
FTP	(FTPPA)	Fizika i tekhnika poluprovodnikov
FTT	(FTVTA)	Fizika tverdogo tela
IAN Arm	(IAAFA)	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAN B	(VABFA)	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IAN Est	(ETFMB)	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
IAN Fiz	(IANFA)	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya
IAN Uz	(IUZFA)	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk

I-FZh	(INFZA)	Inzhenerno-fizicheskiy zhurnal
IT	(IZTEA)	Izmeritel'naya tekhnika
IVUZ Fiz	(IVUFA)	Izvestiya vysshikh uchebnykh zavedeniy. Fizika
IVUZ Priboro	(IVUBA)	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye
IVUZ Radiofiz	(IVYRA)	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika
JMO	(JMKOA)	Jemna mechanika a optika
JTP	(JTPHD)	Journal of Technical Physics [Poland]
KE	(KVEKA)	Kvantovaya elektronika
KhVE	(KHVKA)	Khimiya vysokikh energiy
KL	(KNLTA)	Knizhnaya letopis'
KLDVAD	(-----)	Knizhnaya letopis'. Dopolnitel'nyy vypusk. Avtoreferaty dissertatsii
Kristal	(KRISA)	Kristallografiya
KSpF	(KRSFA)	Kratkiye soobshcheniya po fizika
NM	(IVNMA)	Akademiya nauk SSSR. *Izvestiya. Neorganicheskiye* materialy
OiS	(OPSPA)	Optika i spektroskopiya
OMP	(OPMPA)	Optiko-mekhanicheskaya promyshlennost'
Opt app	(OPAPB)	Optica applicata [Poland]
Otkr izobr	(OIPOB)	Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki
PSS	(PSSAB) (PSSBB)	Physica Status Solidi (A). Applied Research (B). Basic Research
PSU	(PRSUB)	Pribory i sistemy upravleniya
PTE	(PRTEA)	Pribory i tekhnika eksperimenta
RiE	(RAELA)	Radiotekhnika i elektronika
RRP	(RRPZA)	Revue Roumaine de physique

RZhF	(RZFZA)	Referativnyy zhurnal. Fizika
RZhMetrolog	(RZMIB)	Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZhRadiot	(RZRAB)	Referativnyy zhurnal. Radiotekhnika
Sb1	sbornik	Elektronnaya promyshlennost', no. 5-6, 1981
Sb2		Wissenschaftliche Zeitschrift der Humboldt-Universitat zu Berlin, Mathematisch-naturwissenschaftliche, Reihe, no. 1, 1981
Sb3		Radiofizika i issledovaniya svoystv veshchestva, Omsk, 1981
Sb4		15th International Conference on Phenomena in Ionized Gases. Minsk, 14-18 July 1981. Proceedings. Contributed papers. Part 2. Place and year of publication not given.
Sb5		15th International Conference on Phenomena in Ionized Gases. Minsk, 14-18 July 1981. Proceedings. Contributed papers. Part 1. Place and year of publication not given.
Sb6		Turbulentnyye dvukhfaznyye techeniya. Vsesoyuznoye nauchnoye soveshchaniye po teoreticheskim i prikladnym aspektam turbulentnykh techeniy. 4th. Tezisy dokladov. Part 1. Tallin, 1982
Sb7		Povysheniye kachestva i dolgovechnosti slozhnykh sistem v mashinakh i oborudovanii metodami tekhnicheskoy diagnostiki. Khabarovsk, 1981
Sb8		Studenticheskaya nauchno-tekhnicheskaya konferentsiya vuzov pribalticheskikh respublik, BSSR i MSSR. 25th. 21-23 April 1981. Tezisy dokladov. Vol. 1, Tallin, 1981
Sb9		Fizicheskiye protsessy v priborakh elektronnoy i lazernoy tekhniki. Moskovskiy fiziko-tekhnicheskiy institut. Mezhduvedomskiy sbornik. Moskva, 1981
Sb10		Fizika i tekhnologiya tonkikh plenok slozhnykh poluprovodnikov. Ukrainskaya respublikanskaya konferentsiya. 4th. Tezisy dokladov Uzhgorod, 1981
Sb11		Peredacha, priyem i obrabotka informatsii. Voronezh, 1981
Sb12		Nauchnaya konferentsiya molodykh uchenykh Kazakhskogo universiteta, posvyashchennoy 26 s"yezdu Kompartii Kazakh-

stana, Alma-Ata, 15-17 Apr 1981. Trudy Kazakhskiy G U, Alma-Ata, 1981. Deposit at KazNIINTI, no. R304, 15 Dec 1981

Sb13 Poverkhnost'. Fizika, khimiya, mekhanika, no. 1, 1982

Sb14 Sovremennyye problemy matematicheskoy fiziki i vychislitel'noy matematiki. Institut prikladnoy matematiki AN SSSR. Moskva, Nauka, 1982

Sb15 Izvestiya otdeleniya khimicheskikh nauk Bolgarskoy akademii nauk, no. 4, 1980

Sb16 Vsesoyuznoye soveshchaniye po uskoritelyam zaryazhennykh chastits. 7th. Dubna, 14-16 Oct 1980. Trudy. Ob"yedinennyy institut yadernykh issledovaniy, Dubna, 1981

Sb17 Fazirovannyye antennyye reshetki. Moskva, 1981

Sb18 Vsesoyuznyy simpozium po rasprostraneniyu lazernogo izlucheniya v atmosfere. 6th. Tezisy dikladov. Part 1. Institut optiki atmosfery SOAN. Tomsk, 1981

Sb19 Vsesoyuznoye soveshchaniye po radiometeorologii. 5th. Kishinev, 15-19 May 1978, Trudy. Moskva, Gidrometeoizdat, 1981

Sb20 Rasprostraneniye sveta v dipsersnoy srede. Institut fiziki AN BSSR. Minsk, Nauka i tekhnika, 1982

Sb21 Effektivnost' sistem obrabotki radiolokatsionnoy informatsii. Moskva, 1981

Sb22 Astrometriya i astrofizika, no. 42, 1980

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Sb25 Fundamental'nyye osnovy opticheskoy pamyati i sredy, no. 12, Kiyev, 1981

Sb26 Izvestiya na NII po material'no-tekhnicheska baza kul'turata, no. 15, 1979

Sb27 Novyye elementy i metody rascheta informatsionnykh sistem. Moskva, 1980.

Sb28 Metrologiye i tochnyye izmereniya, no. 1, 1981

Sb29 Izmereniye parametrov formy i spektra radiotekhnicheskikh signalov. Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya, 20-22 Oct 1981. Tezisy dokladov. Khar'kov, 1981

Sb30 Elektronnaya promyshlennost', no. 7-8, 1981

Sb31 Vsesoyuznoye soveshchaniye "Eksperimental'nyye metody i apparatura dlya issledovaniya turbulentnosti." 4th. Novosibirsk, 30 Sep - 2 Oct 1981. Tezisy dokladov. Institut teplofiziki SOAN. Novosibirsk, 1981

Sb32 Diagnostika plazmy, no. 4/1, Moskva, 1981

Sb33 Elektronnaya tekhnika. Seriya 8. Upravleniye kachestvom, metrologiya, standartizatsiya, no. 3, 1981

Sb34 Soveshchaniye po yadernoy spektroskopii i struktura atomnogo yadra, 32nd. Kiyev, 16-18 March 1982. Tezisy dokladov. Leningrad, Nauka, 1982

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Sb36 Issledovaniya v oblasti izmereniy geometricheskikh velichin. Moskva, 1981

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Sb43 Diagnostika plazmy, no. 4/2, Moskva, 1981

Sb44 Ucheniye zapiski TsAGI, no. 5, 1981

Sb45 Elektronnaya tekhnika. Seriya 1. Elektronika SVCh, no. 3, 1981

Sb46 Tenth European Conference on Controlled Fusion and Plasma Physics, Moscow, 14-19 Sep 1981. Vol. 1. Contributed papers. Moskva, 1981.

SCF	(SCEFA)	Studii si cercetari de fizica
TiEKh	(TEKHA)	Teoreticheskaya i eksperimantal'naya khimiya
TiMF	(TMFZA)	Teoreticheskaya i matematicheskaya fizika
TKiT	(TKTEA)	Tekhnika kino i televedeniya
Trl	Trudy	Kiyevskiy politekhnicheskiy institut. Vestnik. Radioelektronika, no. 18, 1981
Tr2		Fizicheskiy institut AN SSSR. Trudy, no. 132, 1982
Tr3		VNII monokristallov, stsintilyatsionnyk materialov i osobo chistykh khimicheskikh veshchestv, Sbornik nauchnykh trudov, no. 7, 1981
Tr4		Institut eksperimental'noy meteorologii. Gosudarstvennyy komitet SSSR po gidrometeorologii i kontrolyu prirodnoy sredy. Trudy, no. 26/99, 1981
Tr5		Fizicheskiy institut AN SSSR. Trudy, no. 131, 1982
Tr6		Kiyevskiy G U. Vestnik. Fizika, no. 22, 1981
TVKE	(TVKED)	Tochnoye vremya i kvantovaya elekronika
TVT	(TVYTA)	Teplofizika vysokikh temperatur
UFN	(UFNAA)	Uspekhi fizicheskiy nauk
UFZh	(UFIZA)	Ukrainskiy fizicheskiy zhurnal
VMU	(VMUFA)	Moskovskiy universitet. Vestnik. Fizika, astronomiya
ZhETF	(ZETFA)	Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhETF P	(ZFPRA)	Pis'ma v Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhFKh	(ZFKHA)	Zhurnal fizicheskoy khimii
ZhNiPFiK	(ZNPFA)	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii
ZhNKh	(ZNOKA)	Zhurnal neorganicheskoy khimii
ZhPMTF	(ZPMFA)	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki
ZhPS	(ZPSBA)	Zhurnal prikladnoy spektroskopii
ZhTF	(ZTEFA)	Zhurnal tekhnicheskoy fiziki
ZhTF P	(PZTFD)	Pis'ma v Zhurnal tekhnicheskoy fiziki
ZhVMMF	(ZVMFA)	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki

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NS. Non-Soviet
0. Affiliation not given
1. Physics Institute imeni Lebedev, AN SSSR, Moscow (Fizicheskiy institut imeni Lebedeva AN SSSR).
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23. Institute of Atomic Energy im Kurchatov, Moscow (Institut atomnoy energii AN SSSR).
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59. Institute of Physics Research, AN ArmSSR (Institut fizicheskikh issledovaniy).
60. Institute of Physics, AN AzSSR (Institut fiziki AN AzSSR).
66. Institute of Solid State Physics, AN SSSR (Institut fiziki tverdogo tela AN SSSR).
67. Institute of Physics of Chemistry, AN SSSR (Institut khimicheskoy fiziki AN SSSR).
71. Institute of Applied Mathematics, AN SSSR (Institut prikladnoy matematiki AN SSSR).
72. Institute of Spectroscopy, AN SSSR (Institut spektroskopii AN SSSR).
74. Institute of High Temperatures, AN SSSR (Institut vysokikh temperatur AN SSSR).
75. Institute of Automation and Electronic Measurements, Siberian Branch, AN SSSR (Institut avtomatiki i elektrometrii SOAN).
77. Institute of Inorganic Chemistry, Siberian Branch, AN SSSR (Institut neorganicheskoy khimii SOAN).
78. Institute of Atmospheric Optics, Siberian Branch, AN SSSR (Institut optiki atmosfery SOAN).
79. Institute of Nuclear Physics, Siberian Branch, AN SSSR (Institut yadernoy fiziki SOAN).
82. Physicotechnical Institute, AN UkrSSR, Khar'kov (Fiziko-tekhnicheskiy institut AN UkrSSR).
84. Institute of Radiophysics and Electronics, AN UkrSSR (Institut radiofiziki i elektroniki AN UkrSSR).
86. Azerbaydzhan State University (Azerbaydzhanskiy GU).
87. Belorussian State University (Belorusskiy GU).
98. Institute of Nuclear Physics at Moscow State University (Institut yadernoy fiziki pri Moskovskom GU).
106. Kiev Polytechnic Institute (Kiyevskiy politekhnicheskiy institut).
109. Latvian State University (Latviyskiy GU).
110. Leningrad Electrotechnical Institute (Leningradskiy elektrotekhnicheskiy institut).
114. L'vov State University (L'vovskiy GU).
118. Moscow Physicotechnical Institute (Moskovskiy fiziko-tekhnicheskiy institut).
119. Moscow Institute of Electronic Engineering (Moskovskiy institut elektronnoy tekhniki).
122. Scientific Research Institute of Physicochemistry im Karpov (NI fiziko-khimicheskiy institut im Karpova).
132. Tomsk State University (Tomskiy GU).
133. Central Aerohydrodynamic Institute im Zhukovskiy (Tsentral'nyy aerogidrodinamicheskiy institut im Zhukovskogo).
137. Voronezh State University (Voronezhskiy GU).
140. All Union Scientific Research Institute of Physicotechnical and Radiotechnical Measurements (VNII fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy).
148. Institute of Terrestrial Magnetism, the Ionosphere and Radiowave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR).
159. Institute of Thermophysics, Siberian Branch, AN SSSR, Novosibirsk (Institut teplofiziki SOAN).
161. Moscow Institute of Radio Engineering, Electronics and Automation (Moskovskiy institut radiotekhniki, elektroniki i avtomatiki).
163. All Union Scientific Research Institute of Metrology im Mendeleyev (VNII metrologii im Mendeleyeva).
176. Moscow Geological Prospecting Institut im Ordzhonikidze (Moskovskiy geologorazvedochnyy institut im Ordzhonikidze).

181. Institute of Nuclear Research, AN UkrSSR, Kiev (Institut yadernykh issledovaniy AN UkrSSR).
188. All Union Scientific Research Institue of Single Crystals, Scintillation Materials and Extra Pure Chemical Substances, Khar'kov (VNII monokristallov, stsintillyatsionnykh materialov i osobo cheistykh khimicheskikh veshchestv).
193. Institute of Theoretical and Applied Mechanics, Siberian Branch, AN SSSR, Novosibirsk (Institut teoreticheskoy i prikladnoy mekhaniki SOAN).
202. Institute of Electronics, AN UzSSR, Tashkent (Institut elektroniki AN UzSSR).
206. Institute of Geology and Geophysics, Siberian Branch, AN SSSR, Novosibirsk (Institut geologii i geofiziki SOAN).
210. Institute of Physics, Siberian Branch, AN SSSR (Institut fiziki SOAN).
213. Leningrad Technological Institute (Leningradskiy tekhnologicheskiy institut).
218. Second Moscow State Medical Institute im Pirogov (Vtoroy Moskovskiy meditsinskiy institut im Pirogova).
220. Institute of Experimental Meteorology (Institut eksperimental'noy meteorologii).
231. Scientific Research Institute of Motion Pictures and Photography (NI kinofotoinstitut).
242. Kazakh State University, Alma Ata (Kazakhskiy GU).
248. Institute of Mechanics at Moscow State University (Institut mekhaniki pri Moskovskom GU).
252. Leningrad Institute of Nuclear Physics, AN SSSR (Leningradskiy institut yadernoy fiziki AN SSSR).
276. Institute of Physics of the Earth im Shmidt, AN SSSR (Institut fiziki Zemli im Shmidta AN SSSR).
299. Institute of Electronics, AN BSSR (Institut elektroniki AN BSSR).
307. Institute of Thermophysics and Electrophysics, AN EstSSR (Institut termofiziki i elektrofiziki AN EstSSR).
313. Scientific Research Institute of Applied Physics at Irkutsk State University (NII prikladnoy fiziki pri Irkutskom GU).
325. Scientific Research Institute of Physics, Rostov-on-Don (NII fiziki, Rostov-na-Donu).
326. Institute of Radioelectronics, AN SSSR (Institut radioelektroniki AN SSSR).
332. Frunze Polytechnic Institute (Frunzinskiy politekhnicheskiy institut).
336. Scientific Research Institute of Nuclear Physics, Electronics and Automation at Tomsk Polytechnic Institute (NII yadernoy fiziki, elektroniki i avtomatiki pri Tomskom politekhnicheskom institute).
390. Novosibirsk Electrotechnical Institute of Communications (Novosibirskiy elektrotekhnicheskiy institut svyazi).
395. Scientific Research Institute of Introscopy (NII introskopii).
396. "Optika" Special Design Bureau for Scientific Instrument Manufacture, Siberian Branch, AN SSSR (Spetsial'noye konstruktorskoye byuro nauchnogo priborostroyeniya "Optika" SOAN).
411. Krasnoyarsk State University (Krasnoyarskiy GU).
426. Institute of Applied Physics, AN SSSR, Gor'kiy (Institut prikladnoy fiziki AN SSSR).
438. Ryazan' State Pedagogical Institute (Ryazanskiy gos pedagogicheskiy institut).
445. All Union Scientific Research Institute of the Metrological Service, Moscow (VNII metrologicheskiy sluzhby).

451. All Union Correspondence Institute of the Textile and Light Industry, Moscow (Vsesoyuanyy zaochnyy institut tekstil'noy i legkoy promyshlennosti).
506. Institute of Physics, AN LitSSR (Institut fiziki AN LitSSR).
507. Institute of Solid State and Semiconductor Physics, AN BSSR, Minsk (Institut fiziki tverdogo tela i poluprovodnikov AN BSSR).
511. Institute of Applied Problems in Mechanics and Mathematics, AN UkrSSR, L'vov (Institut prikladnykh problem mekhaniki i matematiki AN UkrSSR).
512. Institute of General and Inorganic Chemistry, AN UkrSSR, Kiev (Institut obshchey i neorganicheskoy khimii AN UkrSSR).
521. Scientific Research Institute for Physics of Condensed Media, Yerevan State University (NII fiziki kondensirovannykh sred Yerevanskogo GU).
534. Institute of Physics, Dagestan Branch, AN SSSR (Institut fiziki Dagestanskogo filiala AN SSSR).
565. Institute of Theoretical and Experimental Physics, Moscow (Institut teoreticheskoy i eksperimental'noy fiziki).
580. Astronomical Observatory of the Odessa State University (Astronomicheskaya observatoriya Odesskogo GU).
586. Bashkir State University, Ufa (Bashkirskiy GU).
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626. All Union Scientific Research Center for Studying Properties of Surfaces and Vacuums, Moscow (VNI tsentr po izucheniya svoystv poverkhnosti i vakuuma).
627. Kubyshev Branch of the Physics Institute, AN SSSR (Kuybyshevskiy filial Fizicheskogo instituta AN SSSR).
628. All Union Scientific Research Institute of the Cable Industry, Moscow (VNII kabel'noy promyshlennosti).
630. Radium Institute im Khlopin (Radiyevyy institut im Khlopina).
666. Perm' Pharmaceutical Institute (Permskiy farmatsevticheskiy institut).
667. Leningrad Institute of Water Transportation (Leningradskiy institut vodnogo transporta).
668. Leningrad Technological Institute of the Cellulose and Paper Industry (Leningradskiy tekhnologicheskiy institut tsellulozno-bumazhnoy promyshlennosti).
669. Institute of Electronics and Computer Engineering, AN LatSSR, Riga (Institut elektroniki i vychislitel'noy tekhniki AN LatSSR).
670. Central Scientific Research Institute of Dermatology and Venereology, Moscow (Tsentral'nyy NI kozhno-venerologicheskiy institut).
671. All Union Scientific Center of Surgery, AMN SSSR, Moscow (Vsesoyuznyy nauchnyy tsentr khirurgii AMN SSSR).
673. Saratov State Pedagogical Institute (Saratovskiy gos pedagogicheskiy institut).
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